

The Link Newsletter

Rimage initiates cooperation

Due to customer requests, Rimage, the world leader in CD-R and DVD-R duplicating machinery, has contacted us, and a number of meetings were held at our office in Copenhagen.

Tom Sherman (USA) on the picture is director of product management. Besides him participated Poul Hellman (European sales) and Nigel Filer (UK).

The main focus was on our CD-R and DVD-R protections combined with Cops Crypto data protection. They needed a good solution and in general face a rising demand for data protection.

We were then lent a 4-drive loader and given access to low-level proprietary specifications and managed to port our products.

The outcome is that we now can supply protection for production on basically all Rimage loaders. Both program and data protection are ready.

Due to our low-level knowledge gained from this project, Rimage has involved us in two international consultancy projects.

We look very much forward to the cooperation with Rimage and their professional clients in the future.



Tom Sherman from Rimage Corporation

Link celebrates 25 years

Founded in 1982, the year 2007 was our 25th year in business. The steady increasing number of protections sold world-wide gave the largest profit ever, EUR 230.000 (\$340,000) before tax.

CD protection is still vital, though gradually being replaced with products for new and upcoming areas, like our UNI-Cops web based protection, DVD protection and now the new USB-Cops.

USB stick protection

Standard low-cost, high-capacity USB sticks are now available. Using USB-Cops it is possible to distribute protected contents on this media, thus saving the cost of the special USB dongles previously needed for this.

Compared to CD-ROM distribution, USB stick distribution has the following advantages:

- No initial costs like a glass-master.
- Fast production cycle, suited to print-on-demand needs.
- User can write to the media, making program and user data portable.
- Due to writability, installation to hard drive can be avoided.
- Works in notebooks and network clients without a CD-drive.

Please note that writability implies the risk of infection by virus/malware. And users can delete USB-stick contents by mistake even if files are set to R/O.

Each USB stick is unique and during the production process (writing data to the stick) this is coded in a small hidden file. When the protected program is run, the code must match the USB stick for the program to run.

Please note that there is no need for any user actions, the protection is transparent.



The security level is on par with CD-Cops and other protections from Link Data Security, thus making it very difficult for hackers to circumvent the protection mechanism.

Most brands of modern USB memory sticks are supported; selection of USB media can be based on normal criteria such as quality, availability and price.

DVDR-Cops

Our DVDR-Cops has been greatly improved; now the need for selecting special DVD-Rs has been eliminated.

One should think that migrating CD-R protection to the DVD-R media would be a matter of simple, maybe tedious work. But the underlying technology is quite different and hence new development and new ideas had to be researched.

DVDR-Cops of course now works fully with Rimage loader equipment.



Watermarking

Protecting audio and video for playback on consumer equipment (non-PC environment) creates problems, since these consumer devices cannot handle encrypted contents. The only possibility is to introduce various degradations to the media in an attempt to hinder PC-based copying while still allowing playback on consumer equipment.

As much consumer equipment is computer-based nowadays, playability is degraded on some platforms. Furthermore, PC-based copying programs can skip/repair the media degradations. All in all only the drawbacks of copy-protection remain. In fact a "repaired" pirate copy can exhibit improved long-term stability compared to the impaired original.

Watermarking is a much better solution here. Each delivery is slightly and unnoticeably modified. Items can be freely copied but will always have the

hidden signature pointing back to the originator. The watermarked items can be used without restriction and will work on any consumer player.

It is vital to have valid identification of all customers. The knowledge that files can be traced back to the purchaser will force users to limit copying to only trusted persons. This is basically what publishers wish to allow. They are mainly hurt by distribution to unknown persons and the mass distribution made possible by this.

While individual watermarking will prevent normal users from distributing files, mass distribution cannot be totally stopped. A customer can identify himself with a stolen credit card, and then it will have no consequences to him that the pirated files can be traced back to the credit card used.

For a webstore individual modifications to the purchased files must be done on-the-fly on the web server.

Codefree factories

The following factories can handle the CodeFree CD-Cops production. There is then no CD-code to enter for users:

- AOD (Mexico)
- CDA (Germany)
- Dicientia (Scandinavia)
- MoserBaer (India)
- MPO Asia (Thailand)
- Optical Experts, OEM (USA)
- Potential (Hong Kong)
- SonoPress (Hong Kong)
- SonoPress (Ireland)
- Sonopress_MX (Mexico)